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SUBJECT: **Engineering Technical Letter (ETL) 98-4: Building Manager Energy Conservation Handbook**

1. Purpose. This ETL provides energy conservation guidance to Building Managers.

2. Application: All Air Force Building Managers.

2.1. Authority: *Air Force Energy Program Procedural Memorandum (AFEPPM) 96-1, 1 Jun 96*

2.2. Effective Date: Immediately.

2.3. Expiration: Five years from date of issue.

3. Requirements. See Attachment 1.

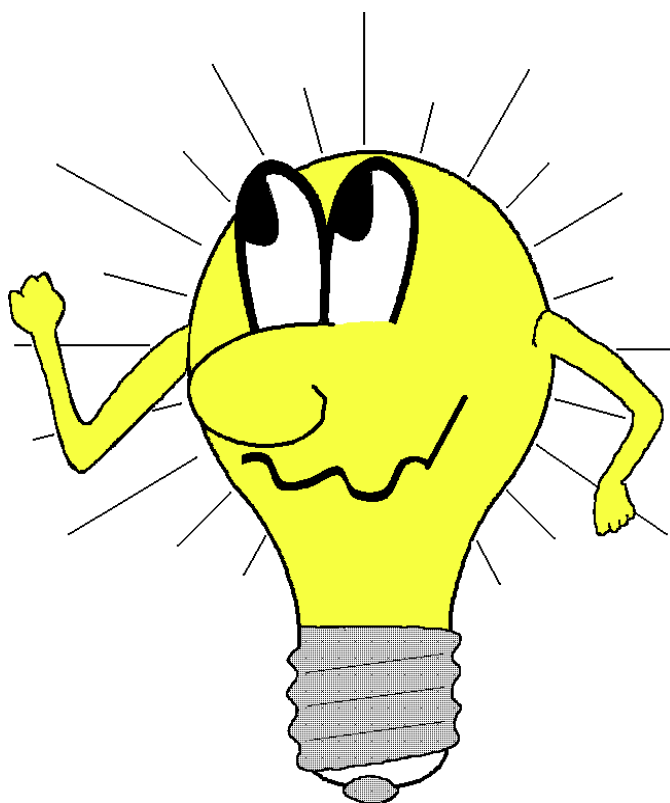
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Director of Technical Support

2 Atch

1. Building Manager Energy Conservation Handbook
2. Distribution List

Building Manager Energy Conservation Handbook



Watt? Me Waste Energy?

BUILDING MANAGER HANDBOOK

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OCTOBER IS NATIONAL ENERGY MONTH



CONSERVING ENERGY IS A WISE INVESTMENT

en'ər-jī



“A Natural Resource Consumed To
Support Life. Slowly Becoming

Extinct.”

Energy - It's A Terrible
Thing To Waste

All our lives revolve around the use of energy. Everything vital to our lives – transportation, entertainment, general well-being – seems to involve the use of energy. Our modern technology depends heavily on an endless supply of energy, yet our supply of energy is not endless. The prevailing thought in the 1950's and 60's was that we would never run out of energy. Gasoline and electricity were cheap; therefore, no effort at efficiency or conservation was made. During the oil embargo of the 1970's, the United States, as well as other areas of the world, became aware of our total dependence on energy and the effect a shortage could have.

Energy is relatively inexpensive in the United States, compared to other countries. For example, energy consumption in Japan and Italy is significantly less per person than in the United States because of its high cost in those countries. Most of the energy consumed in the U.S. is produced domestically, which lowers the cost to the consumer. The major sources of energy used in the U.S. are petroleum and petroleum products. One such source, natural gas, is gaining popularity because of its low cost and easy accessibility.

WHAT IS ENERGY?

Energy usage is typically recorded in Btu's (British Thermal Units), which measure heat content. Energy is usually sold by Btu's or some equivalent measure. For example, natural gas is sold in units of therms; a therm is equivalent to 100,000 Btu's. On a commercial/industrial level, electricity generally has two associated costs. The first cost is for the total kilowatt-hours (kWh) usage (1 kWh = 3,413 Btu). This is the same cost charged to residential electric service. Large electricity consumers also have to pay a demand charge. The electric demand is the largest instantaneous load placed on the electric service at any one time during the month. The demand charge typically makes up a very large portion of a monthly electric bill.

YOUR RESPONSIBILITIES

Why should you conserve energy? Obviously, one person's energy consumption is a small fraction of the total picture, but as more and more people become aware of the things they can do to help, the fraction becomes larger. Each person's contributions are significant, at home, at work, or in both places. As a Building Manager, you can begin to make a difference at your facility and on the base as a whole.

Your primary responsibility is to help the Installation Energy Manager achieve the goal of an energy efficient installation without an adverse impact on the mission or quality of life. Work with the Installation Energy Manager to help focus your efforts toward a common goal. Your team effort will yield more benefits than any individual action.

One of your first tasks as a Building Manager is to discuss your duties with the appointing officer and the Installation Energy Manager, either individually or in a group with other building managers. Transfer of ideas is a great way to find solutions to common problems.

Your responsibilities may include:

- Serving as your building's point of contact.
- Calling in work orders for low cost maintenance and energy conservation opportunities.
- Monitoring the energy operation of your building.
- Recommending energy saving opportunities to your Installation Energy Manager.
- Meeting with your Installation Energy Manager.
- Reporting problems with the building's heating and cooling systems.

If you discover an energy conservation opportunity (ECO), you should either discuss your findings and recommendations with the Installation Energy Manager or submit your idea through the incentive awards office as a suggestion. If your suggestion is technically sound, you may need to prepare a work order. If the idea requires capital investment or is applicable to multiple buildings, the Installation Energy Manager may want to prepare project documentation to receive funds through one of the special funding programs.

BUILDING MANAGER CHECKLIST	
Possible Energy Violations	Corrective Action
<i>Lighting</i>	
1. Lights left on in unoccupied areas _____	2
2. Lights in use when daylight is sufficient _____	2
3. Exterior lights on in daytime _____	2,1
4. Light levels too high in corridor, stairwell, etc. _____	1
5. Dirt on surfaces of lamps and/or light requirements _____	2,1
6. Lighting in work areas exceeds requirements for task _____	3,1
7. Light bulbs with excessive wattage in use _____	2,1
8. Lights over partitions, stacks, etc. _____	1
9. Excessive exterior illumination _____	1
10. Dirty walls and/or windows _____	2,1
<i>Electrical Equipment</i>	
1. Equipment left running when not in use _____	2
2. Personal heaters in use _____	2
3. Vending machine lights on _____	1
<i>Water</i>	
1. Leaking faucets _____	1
2. Excessive flow rates (gallons per minute) _____	1
3. Pipe insulation missing or damaged _____	1
4. Temperatures over 110°F _____	1
5. Steam/water leaks in pipes _____	1
<i>Heating and Cooling</i>	
1. Unconditioned areas not closed off _____	2
2. Air conditioners running after hours _____	2
3. Air vents obstructed _____	2
4. Exterior doors left open (including vestibule doors) _____	2
5. Windows left open _____	2,1
6. Room temperatures too high (greater than 68° - 70°F) during occupied periods (winter) _____	2,1
7. Room temperatures too low (less than 76° - 78°F) during occupied periods (summer) _____	2,1
8. Thermostats damaged _____	1
9. Radiators dirty _____	2,1
10. Radiators on in entry ways _____	1
11. Dirty air filters _____	2,1
12. Pipe insulation missing or damaged _____	1
<i>Refrigeration</i>	
1. Gaskets on doors not forming proper seal _____	1
2. Refrigerator/freezer needs defrosting _____	2
<i>Building</i>	
1. Broken windows/doors _____	1
2. Misaligned exterior door _____	1
3. Cracked caulking around windows, doors, and exterior joints _____	1
4. Defective or missing weatherstripping around windows and/or doors _____	2
CORRECTIVE ACTION LEGEND	
1 → Manager calls Facilities Maintenance Trouble Call Desk	
2 → Manager takes Corrective Action	
3 → Manager contacts Installation Energy Manager	

Lighting is a source for great potential energy savings at installations. Many existing buildings have changed functions over the years and, therefore, have different lighting requirements. For example, the lighting requirements for an office building are not the same as those for a warehouse. In addition, recent developments in high efficiency lighting systems have yet to be incorporated in most facilities. There are many possible ways to save on lighting energy, but before you make any changes, consider the possible effects on other systems, especially heating and cooling.

Turn off lights when they are not needed, even for a short period.

- Mark switches to remind occupants to turn off the lights.
- Turn off building lights when the facility is unoccupied, especially in storage rooms, vending machines, meeting rooms, bulletin boards and unassigned areas, except the lighting required for security.

Make sure existing lighting is properly maintained

- Keep light fixtures clean.
- Keep interior building walls clean and painted with light colors to reflect light.
- Use low partitions to "share" the light in office areas.

If possible, suggest that the building occupants make maximum use of daylight. Using natural light could save electrical energy and decrease heating requirements without causing a significant increase in the building's cooling load.

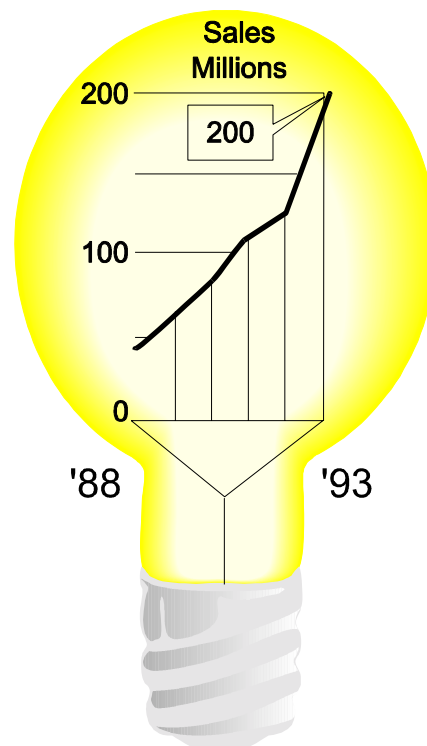
- Be sure windows and skylights are clean and clear.
- Open blinds, drapes and shades, but remember the effect on the cooling system.
- Use glare guards on personal computers.
- Turn off fluorescent lamps when they are not needed.

Additional energy saving measures may be implemented with the help of your Installation Energy Manager.

- Reduce the number of lamps in corridors without significant reduction in lighting levels.
- Replace existing lighting in storage areas and corridors with smaller wattage or higher efficiency lights.
- Suggest task lighting instead of overall room illumination.
- Replace existing inefficient incandescent bulbs with higher efficiency lighting, such as compact fluorescents.

Hot energy - efficient bulbs

World sales of compact
fluorescent bulbs - an
energy - efficient
substitute for
incandescent bulbs:



Did You Know?

It takes approximately 394 pounds of coal to keep a single 100-watt incandescent light bulb burning for 12 hours each day for one year? Burning the coal to produce the energy to light the bulb creates 936 pounds of acid rain – causing 1000 pounds of carbon dioxide and 7.8 pounds of sulfur dioxide. In addition, 90% of the energy consumed by an incandescent bulb is given off as heat rather than light.

LIGHTING.... SIMPLE DELAMPING ACTIONS*	
Delamping Opportunities	✓ Over files and in storage areas ✓ Hallways ✓ Many Offices
Minimal Occupant Impacts	✓ Non-work areas ✓ Overlighted work areas
Maintenance Requirements	✓ Light levels too low? ✓ Fixture cleaning required?

* Ballasts should always be disconnected, but only by maintenance personnel.

A “long-life” incandescent bulb is less energy-efficient than a standard bulb.

QUESTION**1**

Fluorescent lamps use more energy when starting. How long must the light be off before you conserve more than the energy that is required to start it?

- a. 1 hour
- b. 51 minutes
- c. 1 second
- d. 23 minutes

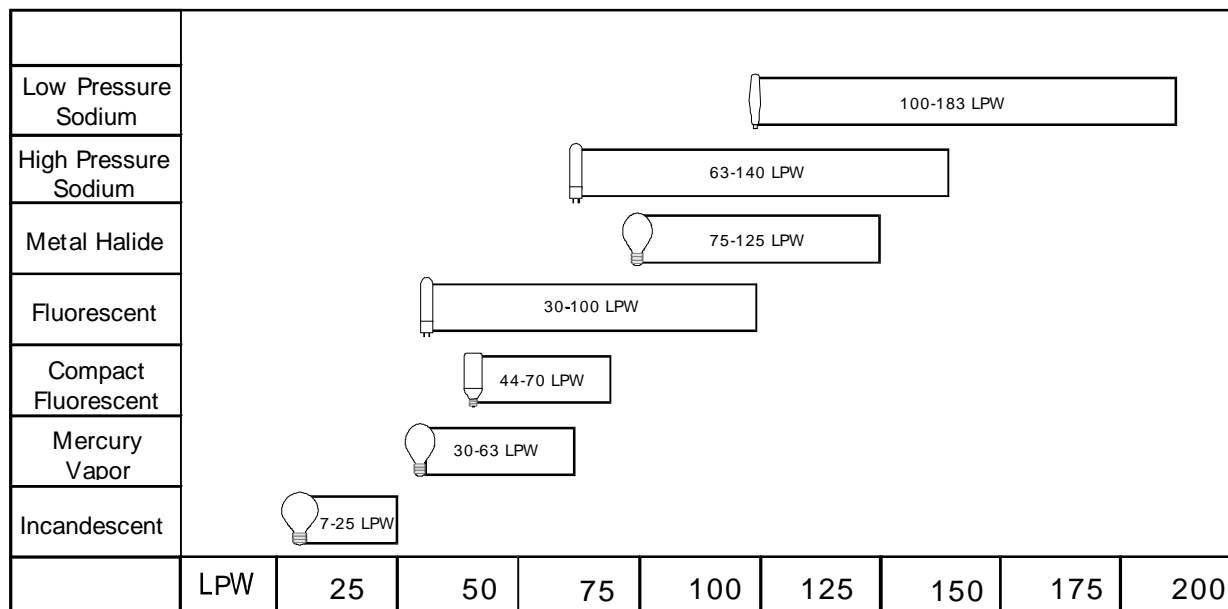
QUESTION**2**

Which type of lamp provides the most light per kilowatt of electricity used?

- a. Incandescent
- b. Low pressure sodium
- c. Fluorescent
- d. All are the same

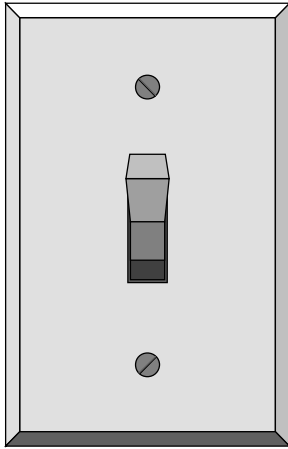
ANSWERS
Question 1: c
Question 2: b

Comparative Efficiency of Different Lamp Types



* LPW= Lumens per Watt

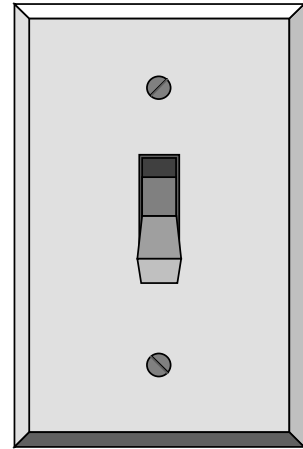
Modern Energy Saving Device



ON

If Not In Use

TURN
IT
OFF



OFF

Infiltration is heat lost or gained when the outside air enters a building through cracks around windows, doors and the building structure. Infiltration causes heat to be lost during the heating season or gained during the cooling season, resulting in discomfort to building occupants. In addition, it is a major contributor to unnecessary heating and cooling costs.

During the heating season, infiltration adds to heat loss because cold outdoor air displaces warm air and must be heated to maintain the desired conditions.

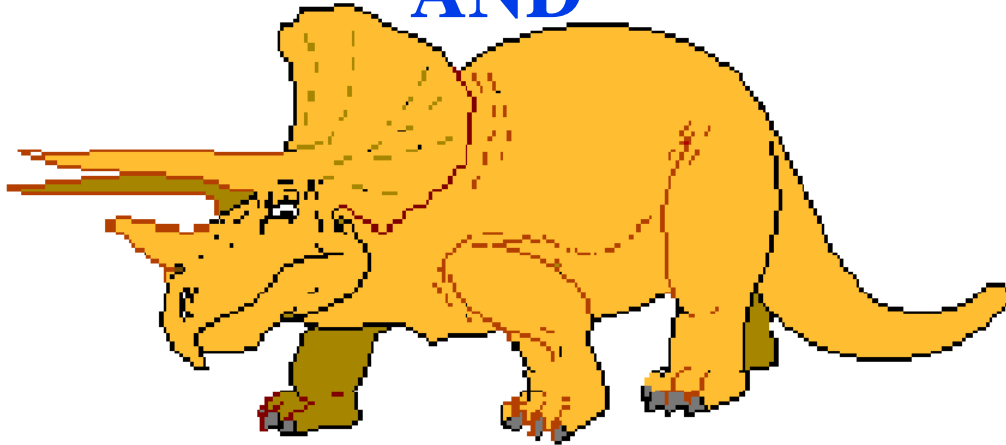
Similarly, during the cooling season, infiltration contributes to heat gain because the warmer outdoor air must be cooled and dehumidified to maintain the desired level of comfort.

Some suggestions for reducing the rate of infiltration into your building are:

- Close all windows and doors during the heating and cooling seasons. Post signs to remind occupants.
- Keep doors closed to unheated rooms.
- Close loading dock doors when not in use. If the building does not have dock curtains or pads for unloading, submit a work order for their installation.
- Check the weatherstripping and caulking periodically. If it is old, dried, peeling, or missing, submit a work order for repair or installation.
- Inspect for air leakage in and around electrical outlets. Use rubber inserts to seal these leaks.
- If the building is drafty, find out if the attic and walls are insulated and if there is insulation under the floor of a building that is above grade. Report your findings to the Installation Energy Manager.
- Submit a work order for immediate repair of cracked or missing windows.
- Cover window air conditioners and close vents during the heating season, or have the air conditioners removed when not in use.

- If people continuously have their windows open during the heating or cooling season, investigate whether there is a problem with the heating or cooling control system that should be repaired by the Civil Engineers.

**HE DIDN'T WORRY
ABOUT ENERGY
AND**



**LOOK WHAT HAPPENED
TO HIM
HELP CONSERVE**

The heating and cooling system is usually the largest energy user in a building. Because your building employs a unique combination of heating, cooling and ventilation systems, use the suggestions for energy conservation as guidelines only. Clear any major changes with the Installation Energy Manager.

Heating and cooling your building to a comfortable level when it is unoccupied is a waste of energy and money. Save energy by setting the thermostat back during the winter and forward during the summer.

Suggestions:

- Shut off radiators and heating registers in corridors, vestibules, stairwells, and lobbies.
- Use thermostats with automatic night setback capabilities.
- Limit after hours access to certain areas to assure you are not heating or cooling the entire building unnecessarily.
- Make sure the thermostats in your building are tamper-proof.
- Encourage your building's occupants to dress appropriately during extreme weather.

Outdoor conditions are the driving factor in the heating and cooling systems for most buildings.

Here are a few simple ideas to reduce the effects of outdoor conditions.

- Use the winter sunshine through a window to help heat the room. Similarly, if the outdoor air is cool, consider opening the windows instead of using the air conditioning system. Make sure all windows are operable.
- When the sun is not shining during the winter, close blinds. Likewise, if the summer sun is out, close blinds.
- If your building occupants complain about cold areas during the winter months, suggest they move their desks away from exterior walls and windows.

- Around the outside of your building, clear foliage away from air intakes and air exhausts.

Heating Energy Savers

During both the heating and cooling seasons . . .

- Clean and replace filters regularly.
- Close off unoccupied rooms.
- Use ventilation fans only as necessary.

With heating equipment. . .

- Keep your heating equipment well tuned. An inefficient heating system wastes 30-50% of the energy it uses.
- Select energy efficient equipment. Get fact sheets for each model.
- Consider a heat pump system to replace electric furnace heating; this could save 30-40% in heating costs.
- Use a clock-thermostat for automatic temperature setbacks.

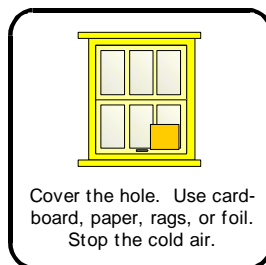
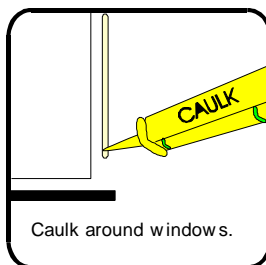
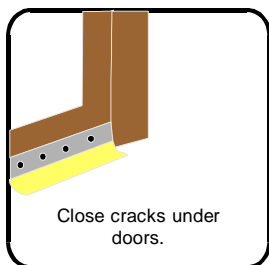
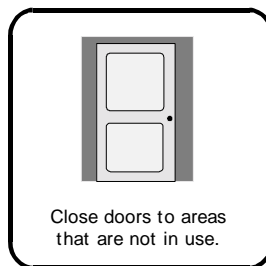
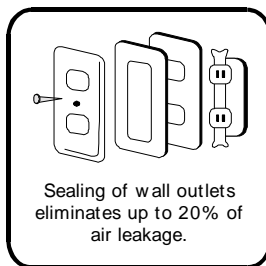
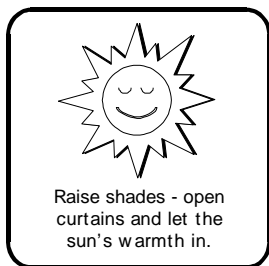
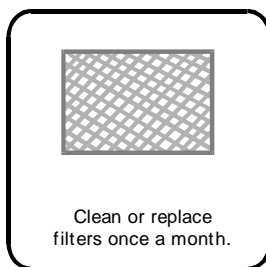
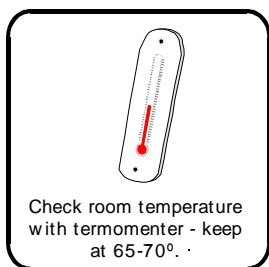
When the heat is on, follow these suggestions to conserve energy in buildings:

- Lower the thermostat at night.
- Keep blinds open during sunny days.
- Clean filters monthly.
- Check ductwork.
- Keep windows tightly closed.
- Dress appropriately — a light long-sleeved sweater equals almost 2 degrees in added warmth.

RECOMMENDED SPACE HEATING SETPOINT		
TYPE OF ROOM	OCCUPIED HOURS TEMPERATURE	UNOCCUPIED HOURS TEMPERATURE
Office space	65-70 °F	<55 °F
Corridors	65-70 °F	<55 °F
Dead storage	55 °F	<55 °F
Cafeterias	65-70 °F	<55 °F
Mechanical rooms	55 °F	<55 °F
Vehicle maintenance shops	55 °F	<55 °F
Occupied storage areas	65-70 °F	<55 °F
Auditoriums	65-70 °F	<55 °F
Computer rooms	65-70 °F	as required
Toilet rooms	65-70 °F	<55 °F
Garages	do not heat	do not heat

* 41CFR101

Low Cost/No Cost Ways to Conserve on Heating



Cooling Energy Savers

As with your heating equipment, keep your air conditioning equipment cleaned and well tuned.

When using air conditioning. . .

- Set your thermostat at 76 °F to 80 °F for recommended comfort and energy efficiency.
- Don't set your thermostat at a colder than normal setting when you turn your air conditioner on. It will not cool faster.
- Set the fan speed on “high” except in very humid weather. When it is humid, a low fan speed will draw more moisture out of the air.
- Keep appliances away from your air conditioning thermostat. Heat from appliances causes the air conditioner to run longer.

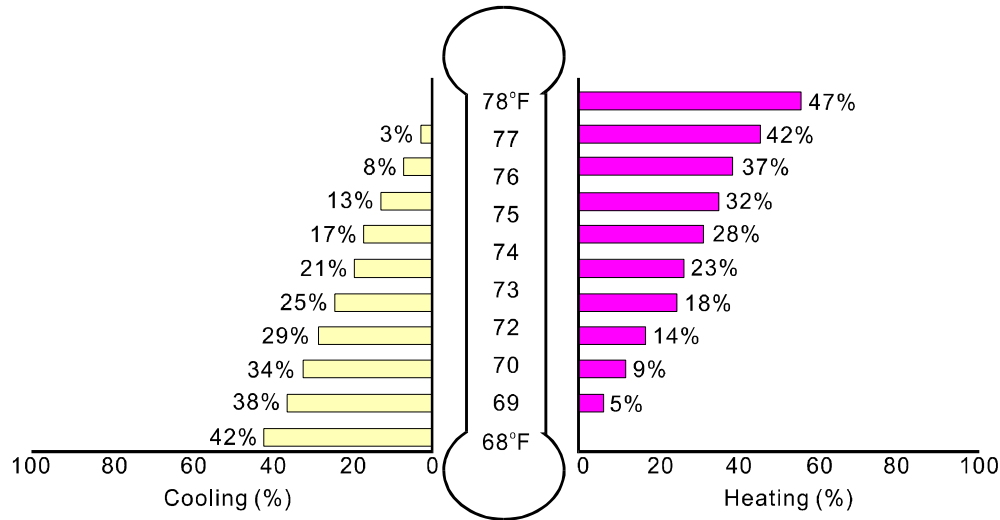
With or without air conditioning. . .

- Keep out daytime sun.
- Keep lights low or off. *Electric lights generate heat.*
- Open windows instead of using air conditioners or fans on cool days and evenings.
- Dress appropriately for outdoor conditions.

RECOMMENDED SPACE COOLING SETPOINT OCCUPIED PERIODS		
TYPE OF AREA	MINIMUM TEMPERATURE	MINIMUM HUMIDITY
Offices	76-80 °F	55%
Cafeterias	76-80 °F	55%
Auditoriums	76-80 °F	50%
Computer rooms	76-80 °F	as needed
Toilet rooms	80 °F	uncontrolled
Storage, equipment rooms, garages	unconditioned	uncontrolled

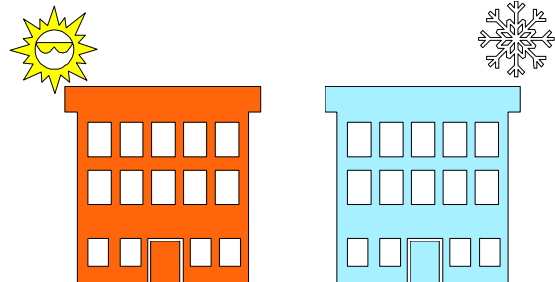
* 41CFR101

Excessive Energy Consumption



If Your Building is too Hot or too Cold,
who can you Call for HELP?

- ☒ Building Manager
- ☒ Service Call Desk
- ☒ Installation Energy Manager



Domestic hot water consumption can account for up to 10% of a building's energy use, or more if your building has a dining room, cafeteria, or laundry facility. There are many inexpensive opportunities to save energy in this area. Implementation of these ideas should be discussed with your Installation Energy Manager.

Normally, cold water must be mixed with hot water at the tap to provide a comfortable water temperature. For this reason, the following suggestions may be used to bring about possible energy savings:

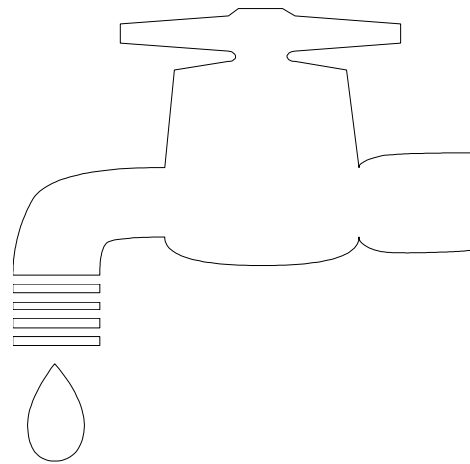
- Ask the Installation Energy Manager to reduce the hot water temperature to about 110 °F for general use. For other operations, such as commercial dishwashing and laundry, a booster at the point of use to generate a water temperature of 140°F may be necessary. High hot water temperatures not only waste energy but are also a safety issue. *Hot water can cause serious burns.*
- Reduce the quantity of hot water used. Not only will you save energy, but water treatment costs and usage payments will decrease.
- Install self-closing faucets.
- Install spray-type faucets with aerators.
- Install low-flow shower heads in buildings with shower facilities such as dorms and gyms. These can reduce water consumption from 5-8 gallons/minute to 1.5-3 gallons/minute.
- Water lawns in the early morning rather than afternoon to reduce evaporation losses. (Watering at night promotes fungus growth.)

Finally, to improve the efficiency of the overall hot water system:

- Inspect insulation on hot water piping and tanks.
- Look for leaks, including those at the faucet.
- Shut off hot water pumps when a building is unoccupied.

WATER LEAKS ARE EXPENSIVE!

One drop per second
(1 cup every 10 minutes)
consumes over 3,200 gallons
(12,000 liters) a year



QUESTION**3**

What is the proper temperature setting for water heaters?

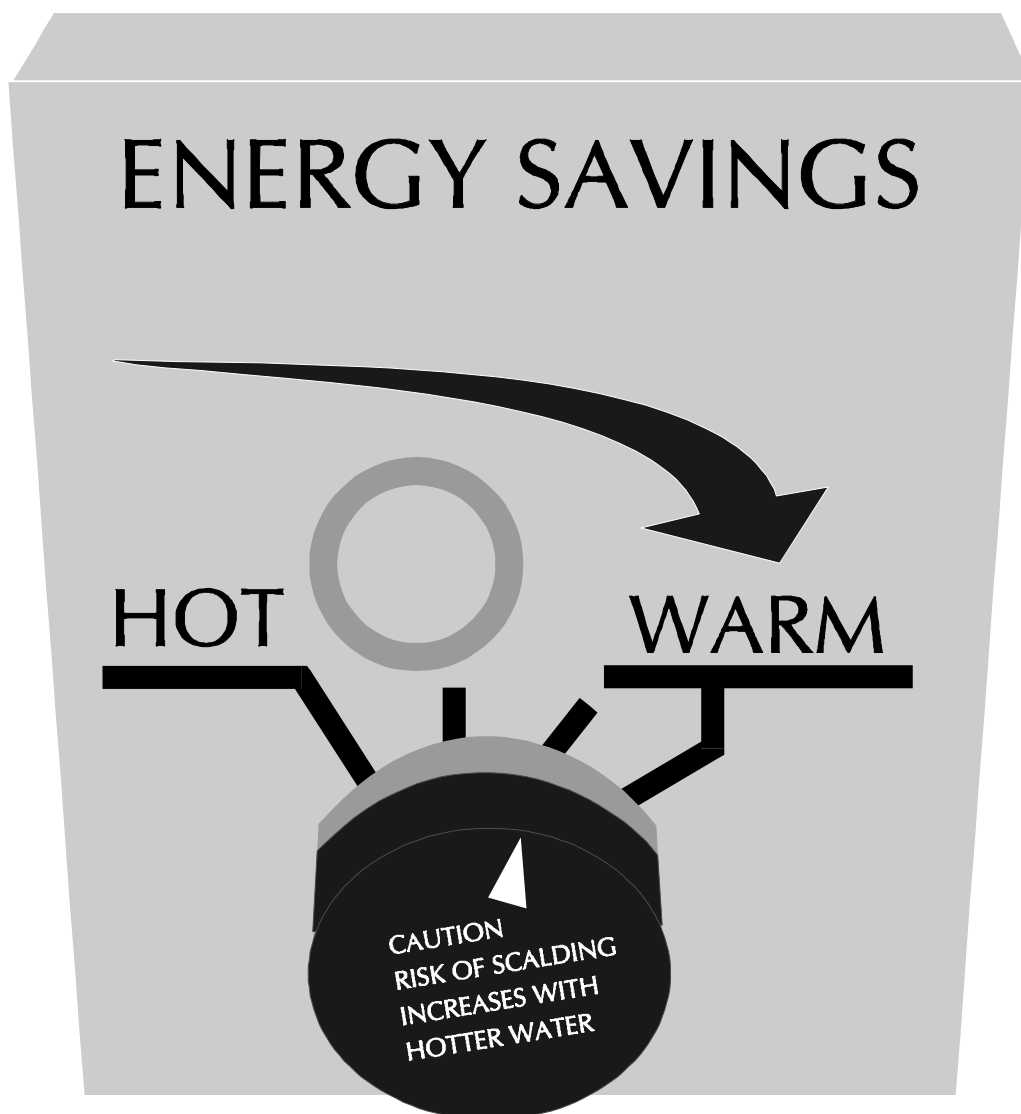
- | | |
|-----------|-----------|
| a. 82 °F | c. 132 °F |
| b. 110 °F | d. 212 °F |

QUESTION**4**

Aerators on faucets reduce water consumption by how much?

- | | |
|--------|--------|
| a. 5% | c. 30% |
| b. 10% | d. 50% |

ANSWERS:
Question: 3: b
Question 4: d



Insulation is an important consideration in heating, cooling, and hot water systems. Poor insulation causes excessive amounts of energy to be lost. Report insulation problems to the Installation Energy Manager.

Among the items that should be insulated are:

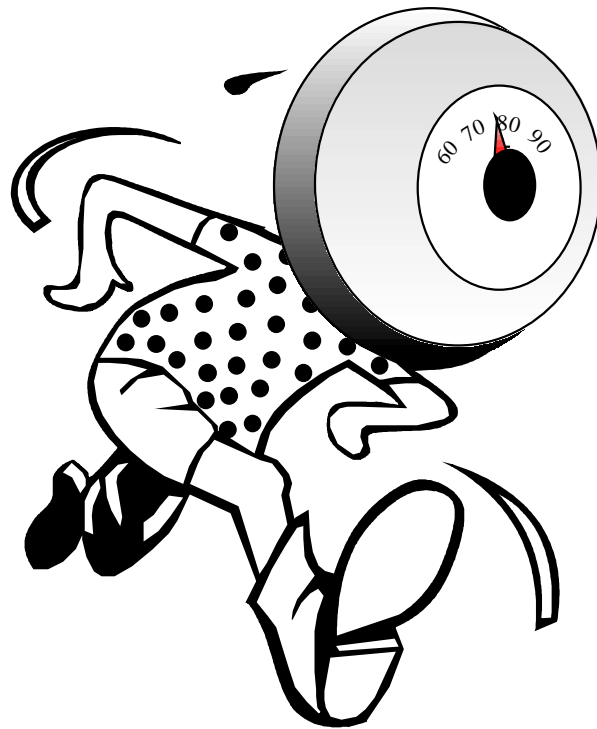
- Hot water lines
- Steam lines
- Chilled water lines
- Water heaters
- Hot water storage tanks

Building insulation is also important. Proper wall and ceiling insulation can drastically improve the effectiveness of heating and cooling systems.

Insulation fact:

- Attic insulation can save 5% or more on heating costs and 15% on air conditioning (depending on the climate).

DON'T LET OUR ENERGY COST RUNAWAY



78°

SETS THE PACE

Please Save

J.Kain

Office equipment and appliances can account for a large percentage of a building's energy consumption. Building occupants should try to use this technology as efficiently as possible.

OFFICE EQUIPMENT FACTS

- Office equipment can account for 10-20% of a building's energy consumption.
- Even the most efficient equipment will waste energy if left on when not in use.
- For new equipment purchases, Federal law requires that products be rated in the top 25% of energy efficiency for all similar products (Presidential Executive Order 12902, Section 507(a)(2)).

F ACT OR FICTION?

Fiction: Computers use large amounts of energy on starting up, and it is cost-effective to leave them running all the time.

Fact: A personal computer (PC) consumes about one second's-worth of running-time energy in starting up.

Fiction: Screen savers save energy.

Fact: Some screen savers are now so complex that they require considerable processing power, and hence energy consumption, even to produce the picture. Screen savers were designed for black and white or green screens to stop the menu bar from being burnt into the screen. Modern screens don't need screen savers, which are now used more for entertainment than actual need -- and cost as much to run as a full screen of work. The best screen saver is to turn the monitor off if it is going to be unused for more than 30 minutes. In that way, both the screen and the energy are conserved.

Fiction: Computers and other office equipment are small energy users.

Fact: A PC left on continuously consumes between \$150 and \$200 in electricity cost per year by doing nothing. A large photocopier consumes nearer \$500 in the same time. Other factors which should be considered are air-conditioning costs, and machine life cycle costs (with associated repair costs).

Fiction: Turning off computers and printers or allowing them to go into sleep mode causes problems with the network.

Fact: Major network software suppliers such as Novell confirm that properly configured and set-up networks should allow PCs and printers to become dormant or be turned off when required. This does not apply to servers.

NEW EQUIPMENT PURCHASES

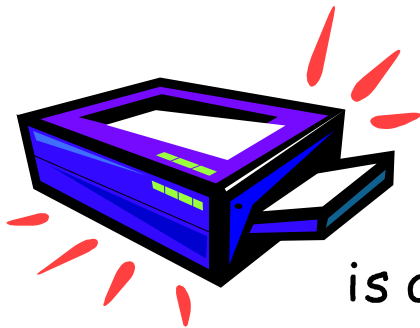
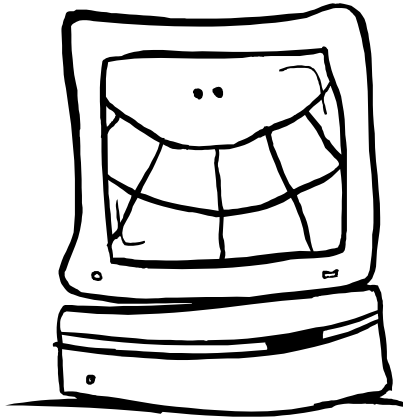
When purchasing new office equipment, ensure that it is an Energy Star product or has an energy-saving mode.

EQUIPMENT	DEFAULT TIME TO LOW-POWER STATE	MAX. POWER IN LOW-POWER STATE
<i>PCs (without monitors)</i>	NA	30W
<i>Monitors</i>	NA	30W
<i>Printers and Printer/Fax Combos:</i>		
1-7 pages per minute	15 min.	15W
8-14 pages per minute	30 min.	30W
<i>Fax Machines:</i>		
1-7 pages per minute	5 min.	15W
8-14 pages per minute	5 min.	30W
>14 pages per minute	15 min.	45W
	DEFAULT TIME TO LOW/OFF	MAX POWER LOW/OFF
<i>Copiers:</i>		
1-20 copies per minute	NA / 30 min.	NA / 5W
21-44 copies per minute	NA / 60 min.	NA / 40W
>44 copies per minute	NA / 90 min.	NA / 40W

Did You Know?

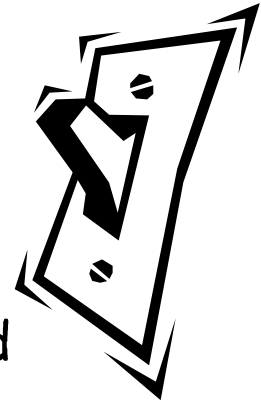
Laptop computers use 10% or less of the electricity consumed by

typical desktop computers.



OFF

is a Three-Letter Word



U NPLUG IT

Many types of office equipment and appliances continue to consume electricity even in the “off” position. To eliminate this energy loss, plug items into a power strip and turn the power strip off when not in use.

PHANTOM ELECTRICAL LOADS	
<u>Office Equipment</u>	<u>Wattage</u>
Computer monitor	1.4
Computer Central Processing Unit (CPU)	1.5 - 3.5
Copier	10.2
Laser printer	1-3
<u>Appliances</u>	
TV	13
Desk lamp	3.3
Microwave	2.7
Answering machine	3.9

Wise selection and use of appliances can save large amounts of energy and money. For existing appliances, the following list provides some tips for energy conservation.

KITCHEN ENERGY SAVERS

- Install a low flow faucet. This conserves water and energy, yet the lower flow pressure is hardly noticeable.
- Use an automatic ignition system instead of a pilot light with gas ovens. You'll save up to one-third of your gas use.
- Never boil water in an open pan. Water will boil faster in a closed container.
- Keep range and reflectors clean.
- Use pressure cookers and microwave ovens if you have them. They can save energy by reducing cooking time.

- If you have a gas stove with a pilot light, make sure the pilot is burning efficiently – with a blue flame.
- Match the size of the pan to the heating element.
- Consider buying a refrigerator/freezer that must be defrosted manually. These are more energy efficient; however, don't allow the frost to build up over 1/4".
- Don't keep refrigerators or freezers too cold. Optimum temperatures are 38 °F to 40 °F for refrigerators, and 5 °F for freezers.
- Check refrigerator seals. You should not be able to slip a piece of paper between the gasket seal and the refrigerator.

LAUNDRY ENERGY SAVERS

- Wash clothes in warm or cold water; rinse in cold. Use cold water detergents.
- Fill washer and dryer completely, but don't overload.
- Don't use too much detergent. Over-sudsing makes your machine work harder and uses more energy. According to Consumer Reports magazine, most manufacturers recommend more detergent than necessary.
- Clean the dryer lint screen after every load. Lint impedes air flow.
- Dry your clothes in consecutive loads. The dryer will not have to warm up between loads.

QUESTION

5

Of the following appliances, which uses the least amount of electricity in an average month?

- a. Microwave oven
- b. Electric water heater
- c. Refrigerator
- d. Electric oven/range

QUESTION

6

What does frost inside a freezer indicate?

- a. The freezer is too cold inside.
- b. The freezer has not been opened in a long time.
- c. The freezer is not properly sealed.
- d. The freezer is well sealed.

ANSWERS:
Question: 5: a
Question: 6: c

NEW APPLIANCES

When buying large appliances, such as dishwashers and refrigerators, compare the energy guide labels of competing models. Compare different brands as well as different models of the same brand to assure you are getting the best buy. Over time, higher energy efficient machines are a more economical purchase.

When purchasing items such as water heaters, furnaces, stoves, and clothes dryers, compare the relative costs of electric and gas appliances. Remember that the highest efficiency appliance does not guarantee the lowest price. Electric appliances such as water heaters tend to be more efficient than gas since there are no losses due to combustion. However, electricity typically is significantly more expensive than gas. Therefore, the lower efficiency gas appliance may be more cost effective than the comparable electric appliance.

As a Building Manager, your task is to set a good example for your building's occupants and to follow up to ensure good habits become lasting practices. The first step to a successful energy conservation program is your commitment to improving the efficient use of energy. With the suggestions presented in this document, tremendous savings can be realized with minimal effort.

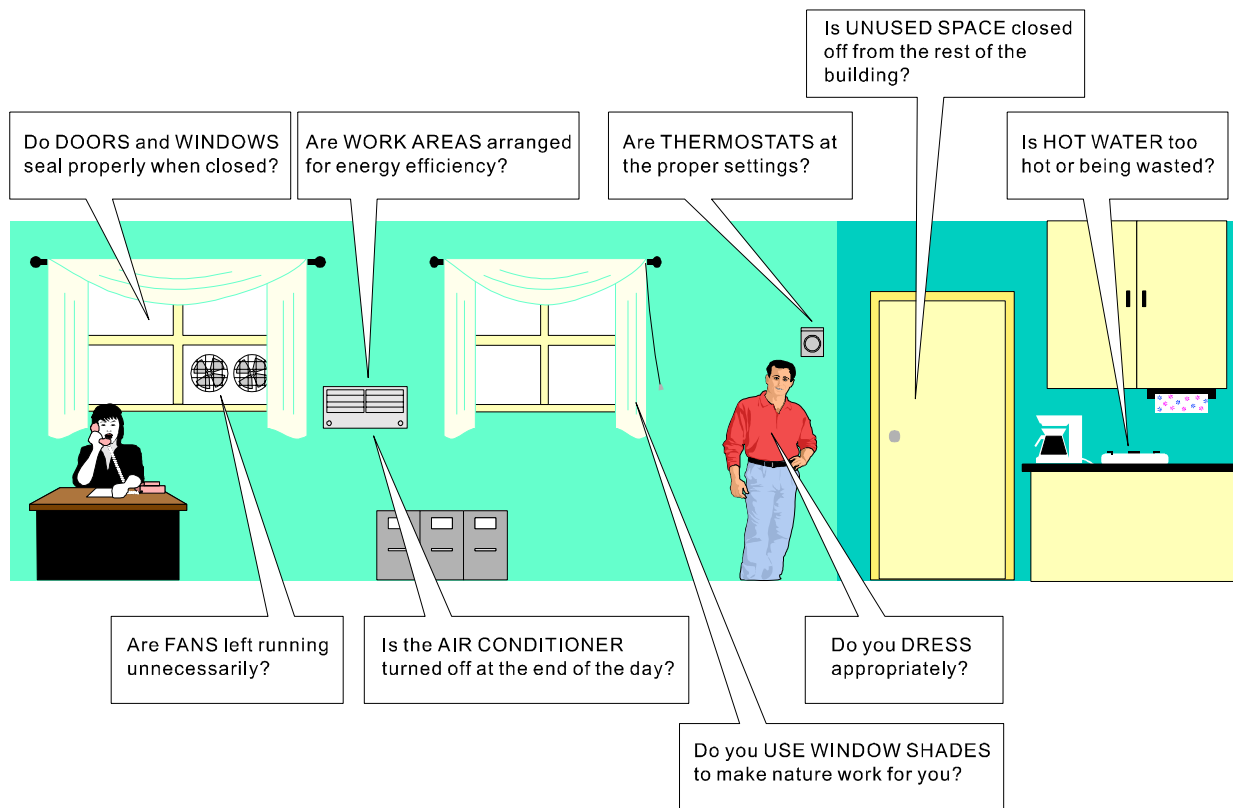
Because known sources of energy are limited and we use energy faster than nature creates it, conservation of energy in all forms is essential. This does not mean sacrificing our modern conveniences. It does mean we must use energy efficiently. We can slow down our consumption of energy if we change the way we use and waste it. Some changes will require time, effort and money, as well as changes in our attitudes and habits. The energy we save today will be available for future use, but once used, it is gone forever. Fortunately, conserving energy saves money.

From time to time you need to evaluate the resources you use in your daily life. In the past, energy was an inexpensive resource, so people didn't try to save. Hopefully, these suggestions have helped you recognize some practices you can implement to conserve energy around your home and in your daily life. Reducing your energy consumption saves money for other needs.

Don't Forget . . .



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Notes

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